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CLAIMS

1) An apparatus for opening containers (11) with screw-off lids (12), characterized by consisting essentially of a device to clamp the lid (12) by self-clamping by rotation between two walls (2, 4) mounted to face each other, but not parallel, so that the lid (12) is blocked at its periphery, the adherent surface of wall (2) obliging the edge (31) of the lid (12) of the container (11) to roll without sliding in the unscrewing direction, the lid (12) sliding along the other wall (4) until the lid (12) is wedged between the walls, said self-clamping arrangement including the rotation device causing the self-wedging by a belt (5)-drive tightened around the container (11) below the lid (12), preferably at the level of the necking (15) under the screw threads (14).

2) An apparatus in conformity with claim 1 characterized by its consisting of :
a lid-wedging plate (1) held by one hand on the lid (12) to be unscrewed, having on the plate's under surface (30) two walls (2,4), preferably at right angles to the plate (1),
and by a flexible ribbon made of supple but adherent material hard to stretch such as a belt (5) of reinforced rubber in the shape of a loop to encircle the container (11), said loop, closed where it is mounted on a winding drum (6), winds around the drum when the drum is pivoted by its firmly-attached handle (7) moved by the other hand, said drum pivoting on an axle (25) that is prefereably at a right angle to the plate, at the free end (45) of a connecting arm (8) which also pivots on an axle (9) parallel to the axle (25) of the drum (6), on the lid-wedging plate (1), preferably close to the perpendicular surface of the adherent wall (2).

3) A device according to the preceding claim characterized by having at least one of the lid-blocking walls (2,4) adjustable to vary the spread between the walls to fit various diameters of twist-off lids (12).

4) A device according to [any of the preceding claims] claim 2 further characterized by a channelling (29) in the lid-wedging plate (1) between the walls (2,4) to allow the belt-winding drum (6) to move closer to small-diameter containers (11) in order to rotate them.

5) A device according to [any of the preceding claims] claim 2 further characterized by an oblong slot (19) in the connecting arm (8) at the level of at least one of the two axles (9, 25) to vary the distance between the axle (9) of the connecting arm (8) on the lid-wedging plate (1) and the axle (25) of the drum (6).

6) A device according to [claims 1 to 4] claim 2 further characterized by a connecting arm (8) that is divided into at least two segments (47, 48) jointed to form an elbow in the plane of the lid-wedging plate (1).

7) A device according to [any of the preceding claims] claim 2 further characterized by a lid-wedging plate (1) with an extension opposite the working zone of the connecting arm (8) to make a handle (33) to hold the device.

8) A device according to [any of the preceding claims] claim 2 further characterized by a belt-winding guide (40) on the drum (6) shaped like a U lying on its side with the upper side (41) and lower side (42) barely touching the upper surface (43) and lower surface (44) of the drum (6), said belt-winding drive being mounted preferably under the free end (45) of the connecting arm (8).

9) A device according to [any of the preceding claims] claim 2 further characterized by a stop (39) to halt the operating handle (7) at its starting position, said stop being integral with the lid-wedging plate (1) or the connecting arm (8).

10) A device [like any of those described in the preceding claims] according to claim 2 characterized by a connecting arm (8) with at least one element to restore the starting position, such as a traction spring (35) with one end coil attached to the lid-wedging plate (1) and the other end coil attached to the connecting arm (8).